

PCT

10/544130

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 31814-WO-U	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/BE2004/000025	International filing date (day/month/year) 25/02/2004	(Earliest) Priority Date (day/month/year) 27/02/2003
Applicant TG CONSULTING...		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box II).

3. ☐ **Unity of invention is lacking** (see Box III).

4. With regard to the **title**,

☐ the text is approved as submitted by the applicant.

☒ the text has been established by this Authority to read as follows:

SEMI-TRAILER CHASSIS AND WHEEL SUSPENSION

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regards to the **drawings**,

- a. the figure of the **drawings** to be published with the abstract is Figure No. 6

☒ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

- b. ☐ none of the figures is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International Application No

T/BE2004/000025

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B62D21/02 B62D21/03 B60G3/18 B60P1/28 B62D21/20

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B62D B60G B60P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 100 35 273 C (SCHIMMELPFENNIG KARL HEINZ) 18 October 2001 (2001-10-18) claim 1; figures 1-4 column 3, paragraph 24 - column 3, paragraph 27 -----	1-5
A	EP 1 127 749 A (SCHIMMELPFENNIG KARL HEINZ) 29 August 2001 (2001-08-29) figures 1,5 column 3, paragraph 17 - column 5, paragraph 24 -----	1-6
A	EP 1 122 101 A (BPW BERGISCHE ACHSEN KG) 8 August 2001 (2001-08-08) figures 1-3 column 3, paragraph 15 column 4, paragraph 20 -----	1-6
A	----- -/--	8

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

8 June 2004

Date of mailing of the international search report

15/06/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
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Authorized officer

Westland, P

INTERNATIONAL SEARCH REPORT

International Application No

T/BE2004/000025

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 196 38 465 A (ORTHAUS FAHRZEUGWERK) 2 April 1998 (1998-04-02) figures 1,2 column 6, line 8 - column 6, line 62 -----	1, 14
A	DE 93 06 171 U (MAN NUTZFAHRZEUGE) 9 June 1993 (1993-06-09) claim 1; figure 1 -----	10

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

T/BE2004/000025

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
DE 10035273	C	18-10-2001	DE 10035273 C1	18-10-2001
			EP 1157897 A2	28-11-2001
EP 1127749	A	29-08-2001	DE 10010998 C1	23-08-2001
			EP 1127749 A2	29-08-2001
EP 1122101	A	08-08-2001	DE 10004227 A1	02-08-2001
			EP 1122101 A2	08-08-2001
DE 19638465	A	02-04-1998	DE 19638465 A1	02-04-1998
			BE 1011460 A3	07-09-1999
			NL 1007050 C2	09-11-1998
			NL 1007050 A1	20-03-1998
DE 9306171	U	09-06-1993	DE 9306171 U1	09-06-1993

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/BE2004/000025

International filing date (day/month/year)
25.02.2004

Priority date (day/month/year)
27.02.2003

International Patent Classification (IPC) or both national classification and IPC
B62D21/02, B62D21/03, B60G3/18, B60P1/28, B62D21/20

Applicant
TG CONSULTING...

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



European Patent Office - P.B. 5818 Patentlaan 2
NL-2280 HV Rijswijk - Pays Bas
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Authorized Officer

Westland, P

Telephone No. +31 70 340-3722



WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITYInternational application No.
PCT/BE2004/000025

JC20 Rec'd PCT/PTO 02 AUG 2005

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material:
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing:
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/BE2004/000025

Box No. II Priority

1. ☒ The following document has not been furnished:

☒ copy of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(a)).

☐ translation of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.

3. Additional observations, if necessary:

Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	
	No: Claims	1-5
Inventive step (IS)	Yes: Claims	
	No: Claims	1-5
Industrial applicability (IA)	Yes: Claims	1-14
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item V.

- 1 The following document referred to in this communication:

D1 : DE 100 35 273 C (SCHIMMELPFENNIG KARL HEINZ) 18 October 2001
(2001-10-18)

2 INDEPENDENT CLAIM 1

- 2.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 is not new in the sense of Article 33(2) PCT.
Document D1 discloses (the references in parenthesis applying to this document):

Semi-trailer (see fig. 4) which comprises a chassis (1) with at least two supporting longitudinal runners, connected to each other by means of cross connections (see figures), and two or more single or double wheels (8) whereby the longitudinal runners are situated on the side edges of the chassis (1) at a distance from each other which is larger than the lateral distance between the wheels (8), and whereby every wheel (8) is fixed independently of the other wheels (8) on the chassis by means of two parallel supporting arms (11,12, fig. 2) which are hinged at their far ends (see claim 1, paragraphs 24-27).

The subject-matter of claim 1 is therefore not new.

3 DEPENDENT CLAIMS 2-5

Dependent claims 2-5 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step (Article 33(2) and (3) PCT). All these features are either shown explicitly in or derivable from document D1 (see figures 1-4).

4 DEPENDENT CLAIMS 6,7

The combination of the features of dependent claims 6 and 7 (i.e. including claim 5) is neither known from, nor rendered obvious by, the available prior art. Furthermore, it is these features which appear to solve the problem as outlined in lines 9-14 of the present application and would therefore appear to be essential to the carrying out of the invention. Therefore, an independent claim which includes all the features of present claims 1,5,6,7 would appear to meet the requirements

PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCTNOTIFICATION CONCERNING
TRANSMITTAL OF COPY OF INTERNATIONAL
APPLICATION AS PUBLISHED OR REPUBLISHED

To:

DONNÉ, E.
Bureau M.F.J. Bockstael nv.
Arenbergstraat 13
B-2000 Antwerpen
BELGIQUEDate of mailing (day/month/year)
14 April 2005 (14.04.2005)Applicant's or agent's file reference
31814-WO-U

IMPORTANT NOTICE

International application No.
PCT/BE2004/000025International filing date (day/month/year)
25 February 2004 (25.02.2004)Priority date (day/month/year)
27 February 2003 (27.02.2003)

Applicant

TG CONSULTING, BESLOTEN VENNOOTSCHAP MET BEPERKTE AANSPRAKELIJKHEID et al

The International Bureau transmits herewith the following documents:

copy of the international application as published by the International Bureau on under
No. WOcopy of international application as republished by the International Bureau on 14 April 2005 (14.04.2005) under
No. WO 2004/076263For an explanation as to the reason for this republication of the international application, reference is made to INID codes (15), (48)
or (88) (as the case may be) on the front page of the attached document.

ED	ND	PV	VP	LV	LP
MB	AL	SH	MD	PE	PT
FD	21-04-2005				KP
CV					VV
DC	DP	NB	EN	BE	KV
ACR					

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Authorized officer

Simin Baharlou

Facsimile No.+41 22 740 14 35

Facsimile No.+41 22 338 71 30

CORRECTED VERSION

**(19) World Intellectual Property
Organization
International Bureau**



(43) International Publication Date
10 September 2004 (10.09.2004)

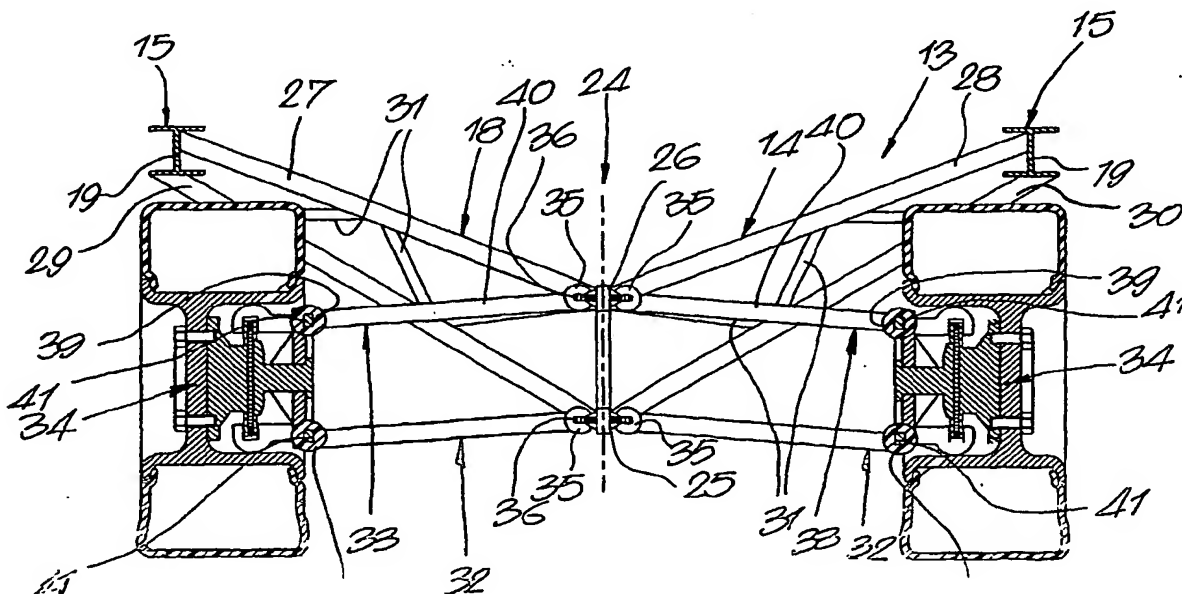
PCT

(10) International Publication Number
WO 2004/076263 A1

- (51) **International Patent Classification⁷:** **B62D 21/02,**
21/03, B60G 3/18, B60P 1/28, B62D 21/20
- (21) **International Application Number:**
PCT/BE2004/000025
- (22) **International Filing Date:** 25 February 2004 (25.02.2004)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
2003/0130 27 February 2003 (27.02.2003) BE
- (71) **Applicant (for all designated States except US):** **TG CONSULTING, BESLOTEN VENNOOTSCHAP MET BEPERKTE AANSPRAKELIJKHEID [BE/BE];** Luytenstraat 58, B-3960 Bree (BE).
- (72) **Inventor; and**
- (75) **Inventor/Applicant (for US only):** **GEUSSENS, Tony, Lambert, Guy, Ghislain [BE/BE];** Luytenstraat 58, B-3960 Bree (BE).
- (74) **Agent:** **DONNÉ, E.;** Bureau M.F.J. Bockstael nv., Arenbergstraat 13, B-2000 Antwerpen (BE).
- (81) **Designated States (unless otherwise indicated, for every kind of national protection available):** AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) **Designated States (unless otherwise indicated, for every kind of regional protection available):** ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

- (54) Title: SEMI-TRAILER CHASSIS AND WHEEL SUSPENSION**



- (S7) Abstract:** Improved semi-trailer which mainly consists of a chassis (14) with at least two supporting longitudinal runners (15), connected to each other by means of cross connections (16-17-18), and two or several single or double wheels (4) carrying the chassis (14), characterised in that the longitudinal runners (15) are situated on the side edges of the chassis (14) at a distance from each other which is larger than the distance between the wheels (4), and whereby every wheel (4) is fixed independently of the other wheels (4) on the chassis (14) by means of two parallel supporting arms (32, 33) which can hinge at their far ends.

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/BE2004/000025

of the PCT in respect of novelty and inventive step (Article 33(2) and (3) PCT).

5 INDUSTRIAL APPLICABILITY

Chassis and wheel suspension for a semi-trailer.